



USPTO

[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

 Search: [The ACM Digital Library](#) [The Guide](#)

estimated and actual cpi



THE ACM DIGITAL LIBRARY


[Feedback](#) [Report a problem](#) [Satisfaction survey](#)
Terms used: **estimated** and **actual cpi**

Found 27,622 of 215,737

Sort results by

relevance

[Save results to a Binder](#)[Try an Advanced Search](#)

Display results

expanded form

[Search Tips](#)[Try this search in The ACM Guide](#)
☐ Open results in a new window

Results 1 - 20 of 200

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

Best 200 shown

Relevance scale ☐ ☐ ☐ ☐ ☐

1 [Statistical sampling of microarchitecture simulation](#)



Roland E. Wunderlich, Thomas F. Wenisch, Babak Falsafi, James C. Hoe

 July 2006 **ACM Transactions on Modeling and Computer Simulation (TOMACS)**, Volume 16 Issue 3

Publisher: ACM Press

 Full text available: pdf(667.80 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Current software-based microarchitecture simulators are many orders of magnitude slower than the hardware they simulate. Hence, most microarchitecture design studies draw their conclusions from drastically truncated benchmark simulations that are often inaccurate and misleading. This article presents the Sampling Microarchitecture Simulation (SMARTS) framework as an approach to enable fast and accurate performance measurements of full-length benchmarks. SMARTS accelerates simulation by selective ...

Keywords: Microarchitecture simulation, SPEC CPU2000 simulation, cold-start bias, simulation sampling, statistical sampling

2 [SMARTS: accelerating microarchitecture simulation via rigorous statistical sampling](#)



Roland E. Wunderlich, Thomas F. Wenisch, Babak Falsafi, James C. Hoe

 May 2003 **ACM SIGARCH Computer Architecture News , Proceedings of the 30th annual international symposium on Computer architecture ISCA '03**, Volume 31 Issue 2

Publisher: ACM Press

 Full text available: pdf(278.61 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)

Current software-based microarchitecture simulators are many orders of magnitude slower than the hardware they simulate. Hence, most microarchitecture design studies draw their conclusions from drastically truncated benchmark simulations that are often inaccurate and misleading. This paper presents the Sampling Microarchitecture Simulation (SMARTS) framework as an approach to enable fast and accurate performance measurements of full-length benchmarks. SMARTS accelerates simulation by selectively ...

3 [Pinpointing Representative Portions of Large Intel® Itanium® Programs with Dynamic Instrumentation](#)

Harish Patil, Robert Cohn, Mark Charney, Rajiv Kapoor, Andrew Sun, Anand Karunanidhi

 December 2004 **Proceedings of the 37th annual IEEE/ACM International Symposium on Microarchitecture MICRO 37**


[Web](#) [Images](#) [Video](#) [News](#) [Maps](#) [more »](#)

[Advanced Scholar Search](#)
[Scholar Preferences](#)
[Scholar Help](#)

Scholar All articles - Recent articles Results 21 - 30 of about 8,810 for performance metric cpi. (0.1

All Results

[B Calder](#)
[P EFFICIENCY](#)
[R Balasubramon...](#)
[P Bose](#)
[R Wunderlich](#)

[PDF] **"Performance Analysis and Monitoring using Hardware Counters**

F Parienté - developers. sun. com/solaris/articles/hardware_counters. ..., 2001 - fz-juelich.de

... Page 16. Second International APART Workshop, Munich, 2000/09/01 MCAD code:

performance

metrics user kernel user kernel mips 27 34 45 - **cpi** 7.4 7.3 9.8 - ...

Cited by 4 - [Related Articles](#) - [View as HTML](#) - [Web Search](#)

System optimization for OLTP workloads - all 6 versions »

S Kunkel, B Armstrong, P Vitale - Micro, IEEE, 1999 - [ieeexplore.ieee.org](#)

... of the Apache L2 cache.) The next **metric**, a component ... cache are of particular interest

to **performance** because they make up a large component of the **CPI**. ...

Cited by 16 - [Related Articles](#) - [Web Search](#)

Construction and Use of Linear Regression Models for Processor

Performance Analysis

PJ Joseph, K Vaswani, MJ Thazhuthaveetil - High-**Performance** Computer

Architecture, 2006. The Twelfth ..., 2006 - [ieeexplore.ieee.org](#)

... for linear model construction. We use **CPI** as the **performance metric** in the rest of this paper. Sparsity of effects: Our experiment ...

Cited by 10 - [Related Articles](#) - [Web Search](#)

SMARTS: accelerating microarchitecture simulation via rigorous

statistical sampling - all 17 versions »

RE Wunderlich, TF Wenisch, B Falsafi, JC Hoe - Computer Architecture, 2003.

Proceedings. 30th Annual ..., 2003 - [ieeexplore.ieee.org](#)

... A recent study [3] has suggested that out-of-order and speculative ordering has minimal impact on **CPI** and other **performance metrics**. ...

Cited by 160 - [Related Articles](#) - [Web Search](#)

Performance of the VAX-11/780 translation buffer: simulation and

measurement - all 3 versions »

DW Clark, JS Emer - ACM Transactions on Computer Systems (TOCS), 1985 - [portal.acm.org](#)

... We look first at miss ratios, the most common **metric** of TB **performance**, and then proceed to consider more detailed data and other **performance metrics**. ...

Cited by 92 - [Related Articles](#) - [Web Search](#)

[PDF] Many Benchmarks Stress the Same Bottlenecks - all 2 versions »

H Vandierendonck, K De Bosschere - Proc. of the Workshop on Computer Architecture Evaluation ..., 2004 - [escher.elis.ugent.be](#)

... itself with mea- suring abstract **performance metrics**, called workload ... There are numerous

abstract **metrics** that one can ... The **CPI** model is often used to separate ...

Cited by 16 - [Related Articles](#) - [View as HTML](#) - [Web Search](#)